BEFORE THE AIR QUALITY CONTROL COMMISSION, STATE OF COLORADO

IN THE MATTER OF PROPOSED REVISIONS TO REGULATION NUMBER 3, PARTS A, B AND C, REGULATION NUMBER 6, PART A, AND REGULATION NUMBER 7

REBUTTAL STATEMENT OF NOBLE ENERGY, INC. AND ANADARKO PETROLEUM CORPORATION

I. Executive Summary to Rebuttal Statement

Noble Energy, Inc. and Anadarko Petroleum Corporation ("Noble and Anadarko") provide the following executive summary of their Rebuttal Statement.

As stated in their Prehearing Statement, Noble and Anadarko support the proposed revisions to Regulation 7 ("Proposed Rules"), with minor technical clarifications. The Proposed Rules will achieve enhanced air quality benefits at an acceptable cost. The Proposed Rules set forth science-based, common-sense measures to reduce VOC and hydrocarbon emissions that have already been adopted by some operators in the oil and natural gas industry.

The Proposed Rules represent input from a wide variety of stakeholders, including Noble and Anadarko. Noble and Anadarko participated with other stakeholders to submit comments, factual information and regulatory proposals to the Air Pollution Control Division ("the Division") during the informal stakeholder process. Noble and Anadarko have continued to do so since the publication of the Proposed Rules. Other parties have likewise submitted information and proposed regulatory language. Prior revisions to Regulation 7 provide a precedent for the Commission to adopt regulatory text that has been agreed upon by two or more parties. The Commission and Division have provided sufficient opportunities for public participation in the rulemaking process over the past year and have incorporated many proposals from multiple parties into the Proposed Rules.

Many aspects of the Proposed Rules are being vigorously debated by parties who seek to make the proposed revisions more or less stringent in various respects. This allows for a healthy debate on the pros and cons of the various requirements in the Proposed Rules, and helps to inform the Commission on the issues raised by the parties. As set forth in more detail below, Noble and Anadarko believe the science-based, feasible and cost effective Proposed Rules strike an appropriate balance on a wide range of issues raised by the stakeholders and parties to this rulemaking, and should be adopted as proposed with only minor technical clarifications as deemed appropriate.

1

¹ Regulation 7 § XIX.K ("In the course of this proceeding, the Division and certain parties supported a compromise proposal regarding the control of condensate tanks. The Commission finds this proposal to be appropriate with certain changes noted herein.") (December 12, 2008).

In addition to explanations of their objections to certain overarching issues raised in various prehearing statements, contained below in this Rebuttal Statement, Noble and Anadarko also provide a table as **Attachment A** that summarizes Noble's and Anadarko's responses to these and other significant issues raised in other parties' prehearing statements. This table is intended to provide the Commission with an easy reference to Noble's and Anadarko's responses to the significant issues raised in this rulemaking.

II. The Rulemaking Complies With the Procedural Requirements of the Colorado Administrative Procedure Act and Colorado Air Pollution Prevention and Control Act

A. Colorado Administrative Procedure Act

The rulemaking has adhered to the procedures set forth at Section 103 of the Colorado Administrative Procedure Act ("Colorado APA"). C.R.S. § 24-4-103. When the Division began to contemplate proposing revisions to Regulations 3, 6 and 7, it announced its intentions and formed a stakeholder group as described in Section 24-4-103(2). "Meeting Notice: Stakeholders Interested in Air Pollution Reporting and Permitting Requirements and Oil & Gas Operations," APCD (Dec. 27, 2012). The Division began to meet regularly with stakeholders in January 2013 and has continued to do so throughout the rulemaking process.

The Division published the Proposed Rules, factual presentations, public comments and related materials on its website. The Division submitted a plain language statement concerning the subject matter of the rulemaking to the Department of Regulatory Agencies. C.R.S. § 24-4-103(2.5)(a). The Division is preparing and will timely file a cost-benefit analysis and Regulatory Impact Analysis. *Id*.

After the stakeholder meetings, the Commission initiated the formal rulemaking process by publishing in the Colorado Register a notice of Public Rulemaking Hearing, and soliciting public input. 36 Colo. Reg. 23 (December 10, 2013). The Commission provided the public a thorough and complete opportunity to participate in the rulemaking process in accordance with C.R.S. § 24-4-103(3)(a).

The lengthy stakeholder process, which spanned nearly eleven months, fully complied with the procedural requirements of the Colorado APA. The Division solicited and responded to input from a broad spectrum of stakeholders, resulting in the Proposed Rules. The Proposed Rules are proof of the success of the stakeholder process as it contains input, either wholesale or in part, received by a wide spectrum of stakeholders. Moreover, the Division continues to solicit and receive input from parties to refine its Proposed Rules. Furthermore, the current rulemaking process allows additional opportunity for all parties to participate and present testimony and evidence on aspects of the Proposed Rules that are of concern.

Adoption of the Proposed Rules would be consistent with the standards for agency action set forth in the Colorado APA. Agency action must be reasonable and supported by substantial evidence in the record. *Bd. of Assessment Appeals v. AM/FM Int'l*, 940 P.2d 338, 347 (Colo. 1997); *Pilgrim Rest Baptist Church, Inc. v. Prop. Tax Adm'r*, 971 P.2d 270, 272 (Colo. App. 1998); *Echo-Star Satellite, L.L.C. v. Arapahoe County Bd. of Equaliz.*, 171 P.3d 633, 636 (Colo.

App. 2007). Agency action will be upheld on appeal if it is not arbitrary or capricious. Courts have explained that unless a reasonable person considering all the evidence of record would be compelled to reach a different result, the agency decision must be upheld. *Ramseyer v. Colo. Dept. of Soc. Servs.*, 895 P.2d 1188, 1192 (Colo. App. 1995); *see also W. Colo. Congress v. Umetco Minerals*, 919 P.2d 887, 891 (Colo. App. 1996). The Commission may adopt the Proposed Rules because there is substantial evidence in the record to support a conclusion that the Proposed Rules meet the requirements of the Colorado APA and Colorado Air Pollution Prevention and Control Act (the "Act").

A decision by the Commission to adopt the Proposed Rules would be entitled to deference. *Dept. of Rev. v. Woodmen of the World*, 919 P.2d 806, 817 (Colo. 1996); *Kramer v. Colo. Dept. of Rev.*, 964 P.2d 629, 630 (Colo. App. 1998). The Commission's decision in cases where the factual questions are "fairly debatable" will be upheld so long as the Commission's decision is supported by competent evidence and the record does not show a clear abuse of discretion. *Bd. of County Comm'rs v. Simmons*, 177 Colo. 347, 494 P.2d 85, 87 (1972). In rulemaking cases where the relevant issues are primarily founded on policy choices rather than factual determinations, deference to the agency's administrative expertise is appropriate. *Brighton Pharmacy, Inc. v. Colo. State Pharmacy Bd.*, 160 P.3d 412, 416 (Colo. Ct. App. 2007) (citation omitted).

The cases cited above make it clear that the Commission is not obligated to resolve the parties' factual disputes. It is reasonable and appropriate for the Commission to adopt a proposal that strikes an appropriate balance between more stringent and less stringent regulatory options. Such is the case with the Proposed Rules.

B. Colorado Air Pollution Prevention and Control Act

The rulemaking also satisfies the procedural requirements found in the Act. C.R.S. § 25-7-101 *et seq.* As detailed further below and in testimony to be presented at the hearing, the Proposed Rules contain requirements that are technically feasible to reduce, prevent, and control air pollution in Colorado, as required by the Act. C.R.S. § 25-7-102. At the same time, the Proposed Rules are structured to be economically reasonable, with benefits that bear a "reasonable relationship to the economic, environmental and energy impacts and other costs." C.R.S. § 25-7-102. As described in more detail in Section VI, the Proposed Rules meet this balance.

Additionally, the Division timely provided an Initial Economic Impact Analysis ("EIA") and other documents in compliance with C.R.S §25-7-110.5(1), and has since submitted an Updated EIA with its Prehearing Statement on January 6, 2014. The Updated EIA is properly based on "reasonably available data" concerning the costs and benefits of the Proposed Rules, as discussed further below in Section V.

III. The Division Has Demonstrated a Basis and Need for the Proposed Rules

Noble and Anadarko believe that the factual record is well developed to support this rulemaking. Among other information, the Division provided statewide oil and natural gas production data, VOC emission inventories, and reports projecting growth in the oil and natural

gas industry. Noble and Anadarko concur that oil and natural gas production in Colorado has grown in recent years and is presently projected to continue to grow with respect to their operations. The Proposed Rules are supported by an ample scientific and factual record that "demonstrates the need for the regulation" as required by the Colorado APA, C.R.S. § 24-4-103(4)(b)(I).

IV. The Commission Is Authorized to Regulate the VOC and Hydrocarbon Emissions Contemplated by This Rulemaking

Anadarko and Noble support the Commission's authority to regulate VOCs and hydrocarbons in this rulemaking. The Commission's authority is set forth in the Act. C.R.S. §§ 25-7-102, 25-7-105(1). The Colorado legislature has specifically stated that it is the State's policy "to use all available practical methods . . . to achieve the maximum practical degree of air purity" in order to foster the "health, welfare, comfort, and convenience of the inhabitants of the state." C.R.S. § 25-7-102. State law tasks the Commission with legal oversight "to reduce, prevent, and control air pollution." *Id.* In that capacity, the Commission here seeks to promulgate emission control regulations applicable to VOCs and hydrocarbons.

Section 109 charges the Commission with adopting emission control regulations such as VOCs and hydrocarbons. C.R.S. § 25-7-109(2)(c). Specifically, the language provides:

(2) Such emission control regulations may include, but shall not be limited to, regulations pertaining to:

(c) Sulfur oxides, sulfuric acids, hydrogen sulfide, nitrogen oxides, carbon oxides, hydrocarbons, fluorides, and any other chemical substance:

Id.; see also C.R.S. § 25-7-103(1.5) (defining air pollutant as "any... gas which is emitted into or otherwise enters the atmosphere, including, but not limited to, any physical, chemical, biological, radioactive (including source material, special nuclear material, and by-product material)" and including "any precursors to the formation of any air pollutant" to the extent recognized by EPA).

The Commission is properly exercising its authority to regulate the emission sources contemplated by this rulemaking. First, the Commission is authorized to adopt "such rules and regulations as are consistent with the legislative declaration set forth in section 25-7-102" including "[e]mission control regulations in conformity with section 25-7-109." C.R.S. §§ 25-7-105(1) and (1)(b). Second, Section 109 provides the Commission with the authority to promulgate regulations requiring "the use of effective practical air pollution controls" for, *inter alia*, "each category of significant sources of air pollutants." C.R.S. § 25-7-109(1)(a). With this rulemaking, the Commission is acting under its express statutory authority to further broaden leak monitoring and repair to incorporate hydrocarbons in addition to VOCs.

The Proposed Rules are consistent with State policy relating to promulgation of air quality control programs because the controls required "bear a reasonable relationship to the economic, environmental, and energy impacts and other costs of such measures." C.R.S. § 25-7-102. Regulation of hydrocarbons under the Proposed Rules satisfies this policy because the additional costs for regulating hydrocarbons are acceptable, while serving to broaden the scope of transparency, understanding, and accountability for emissions related to the oil and natural gas industry. The value added here not only extends beyond increased environmental stewardship for industrial operations, but further seeks to promote the protection of Colorado's air quality through the expanded regulation of VOCs and hydrocarbons while maintaining the economic viability of a critical industry to both the State and nation. Noble and Anadarko contend that the Proposed Rules, while tough, do not impose unmanageable burdens on their oil and natural gas operations. In Colorado, Noble and Anadarko already use technologies such as flares and combustors that are effective and widely used to control VOCs. These same controls also control hydrocarbon emissions. By way of the proposed regulations, the control of both VOCs and hydrocarbons will be better documented and more transparent. Similarly, the proposed regulations expand on other control measures, including, but not limited to, leak detection and repair, auto igniters, low bleed pneumatic devices, and best management practices for maintenance and liquids unloading, which also serve to further reduce hydrocarbon emissions as well as VOCs. The Proposed Rules addressing dual control of both VOCs and hydrocarbons present a reasonable cost for the benefits added.

Minimizing leak occurrences and duration will have long-term effects of offsetting some costs of the Proposed Rules by preventing the loss of valuable product which further enhances the economic consideration of the Proposed Rules. Other policy considerations include that the Proposed Rules will lead to increased accountability for hydrocarbon emissions, more transparency, and thereby build public trust and understanding of hydrocarbon emissions.

While further evidence will be introduced at the hearing on the Proposed Rules, the Proposed Rules satisfy the legislative expectation that controls to treat hydrocarbons be available and technically feasible and that control costs are in line with the economic impacts. *See* C.R.S. § 25-7-109(1)(b)(IV). The controls and other requirements in the Proposed Rules are already being implemented at many oil and natural gas operations, thus demonstrating that such controls are available and technically feasible.

Finally, the Proposed Rules also satisfy Section 25-7-102, which sets forth State policy that regulations be based on a current and accurate inventory of actual emissions. Substantial data about VOC and hydrocarbon emissions from oil and natural gas sources are available and have been presented to the Commission. The State already receives extensive emissions reporting data from the oil and natural gas industry, and the Commission also has received several exhibits estimating emissions of hydrocarbons, including methane and ethane. These data cumulatively provide sufficient detail about hydrocarbon emissions in the State to fulfill the legislative declaration requiring use of current and accurate inventory of emissions.

V. The Proposed Rules Are Cost Effective

The data provided in the Updated EIA and the EIA itself satisfy the statutory requirement that the Proposed Rules be cost effective. C.R.S. § 25-7-109(1)(b)(IV). Noble and Anadarko

have undertaken analyses of their own estimated costs to comply with the Proposed Rules as offered herein. Those cost estimates are contained in **Exhibits A** and **B**, filed with this Rebuttal Statement. This cost data support the Division's position that the costs of the Proposed Rules are reasonable and cost effective on the basis of dollars per ton of VOC removed.

As evidenced herein and as will be further supported during the hearing, the proposed requirements to control both VOCs and hydrocarbons are readily available to operators, are technically feasible and show that the costs are reasonably related to the benefits. A number of measures illustrate the availability, feasibility, and cost effectiveness of the Proposed Rules. In many cases, the controls and other requirements set forth in the Proposed Rules are already being implemented by oil and natural gas operators. Thus, as an example, where flares or combustion devices are used to control VOC emissions, the Proposed Rules would not generally impose additional costs to control and reduce hydrocarbons. In addition, the Division estimates in the Updated EIA that the cost effectiveness of controlling methane and ethane at compressor stations and well production facilities would be \$321 per ton and \$516 per ton of reduced emissions, respectively. Accordingly, the economic costs of regulating hydrocarbon emissions are low and, indeed, cost effective. See C.R.S. § 25-7-109(1)(b)(VII).

A. The Division's Cost and Cost Effective Estimates Are Appropriate

The Division calculated the costs and cost effectiveness of instrument based monitoring for tanks, compressor stations and well production facilities. The Division's average cost and cost effectiveness estimates are summarized in the table below.

Division Cost and Cost Effectiveness Estimates

	Annualized Cost per Facility	\$/ton VOC Removed
Tanks	\$3,949	\$391
Compressor stations	\$3,720	\$667
Well production facilities	\$2,199	\$819

Source: APCD Updated EIA, Tables 16, 25 and 27.

The Division appropriately did not include repair and remonitoring costs in its Updated EIA. Noble and Anadarko projections based on the Proposed Rules with assumptions for minor technical clarifications indicate that remonitoring costs will not increase significantly from current levels. Cost effective measures such as the one found in Section XVII.F.8.b of the Proposed Rules that do not require the use of an IR camera for remonitoring keep the costs reasonable and within the required statutory bounds for costs. Method 21 could be used to satisfy the remonitoring requirement, which provides an alternative for the use of a screening procedure to determine whether a source has no detectable emissions. Method 21, "Determination of

Volatile Organic Compound Leaks" § 8.3.3, available at http://www.epa.gov/ttn/emc/promgate/m-21.pdf.

Based on the information and analyses conducted to date by Noble and Anadarko, the Proposed Rules should not significantly affect the cost of repairs to operators. The companies anticipate that many leaks will likely be discovered and corrected on the spot at minimal cost by the workers performing instrument based monitoring. Also, the repair costs currently incurred under existing monitoring programs could legitimately be excluded from any estimate of the costs of the Proposed Rules.

B. Noble's and Anadarko's Cost and Cost Effectiveness Estimates Support the Division's Estimates

Based on a review of the Proposed Rules with an understanding that minor technical clarifications may be warranted, Noble's estimates of cost and cost effectiveness support the Division's Updated EIA. Based on company-specific historic data and certain estimated values, Noble anticipates that LDAR monitoring at well production facilities would cost between approximately \$260 and \$430 per inspection, with cost effectiveness between approximately \$50/ton and \$380/ton VOC removed, depending on the facility size, emission estimates, and other factors.

Similarly, assuming only minor technical clarifications are made to the Proposed Rules, Anadarko's cost estimates also support the Division's Updated EIA. Based on company-specific historic data and certain estimated values, Anadarko anticipates that LDAR monitoring would cost approximately \$450 per inspection at well production facilities, and approximately \$1,260 per inspection at compressor stations, depending on the facility size, estimated values, and other factors. Anadarko also estimated the cost of the additional AVO inspections that would be required under the Proposed Rules to be approximately \$135 per inspection. The per inspection cost is lower than LDAR inspections, but due to the high number of AVO inspections, this requirement would increase Anadarko's annual well production facility monitoring costs by more than approximately \$3.5 million from current levels overall.

The estimates of cost and cost effectiveness submitted by Noble and Anadarko are preliminary and are subject to change as they continue to evaluate the requirements in the Proposed Rules, and any subsequent revisions thereto.

C. Factors Affecting Estimates of Costs and Cost Effectiveness

In reviewing the various prehearing statements of parties as well as that of the proponent of the Proposed Rules, cost and cost effectiveness is the subject of much scrutiny and disagreement. Noble and Anadarko believe that the Division has taken a reasonable position with respect to costs and cost effectiveness of the current Proposed Rules and have data that support the Division's position. Adoption of other positions could have a significant impact on the figures reported in the Updated EIA. The list below identifies some examples for the Commission's consideration that could have a significant impact on the Cost and Cost Effectiveness estimates.

1. Time Required to Perform Inspections

The Division assumed IR inspections would be 50% faster than Method 21 inspections for compressor stations and well production facilities, and solicited data on this issue to further inform its analysis. APCD Updated EIA at 16. Noble and Anadarko's experience indicates that travel time has as much or more impact on the time needed for LDAR inspections than the number of components, especially for smaller facilities. Nonetheless Noble and Anadarko find the Division's overall time estimates to be reasonable.

The Division estimates that well production facilities would require an average of 4.75 hours to inspect. Based on company-specific historic data, Noble estimates that one inspector can inspect two to three well production facilities per day and Anadarko estimates that one inspector can inspect up to three well production facilities per day. These estimates are in line with the Division's projections.

2. Emission Reductions From LDAR and STEM Requirements

While Noble and Anadarko do not have complete data on the reductions in VOC and hydrocarbon emissions that will result from the LDAR and STEM programs in the Proposed Rules, they believe these are reasonable, cost effective approaches to reduce VOC and hydrocarbon emissions from oil and natural gas operations. As such, they support these requirements in the Proposed Rules. While some parties contend that the Division's estimate of emission reductions that would be achieved by the Proposed Rules is too high, other parties assert that the Division's estimates are too low. In the absence of a widely accepted protocol for estimating the emission reductions achievable through instrument based monitoring, Noble and Anadarko submit that it is reasonable for the Commission to rely on the Division's emission reduction estimates.

3. Ongoing Benefit of Leak Inspections

The Division assumed that the emissions reduction achieved by the STEM and LDAR programs would remain constant every year. Some parties have asserted that there is a declining benefit from STEM and LDAR inspections, thereby significantly increasing the cost per ton of VOC removed in subsequent years, while other parties have asserted that emission reductions rise as inspections become more frequent.

Based on data collected from its own LDAR monitoring experience, Trihydro estimates the initial component leak rate frequency (before the first LDAR inspection) at new and modified gas processing plants to be 1.7%. WPX – PHS Ex. A. The leak rate frequency falls to 0.4% after the first monitoring period and averages 0.3% over 12 consecutive calendar quarters. *Id.* The Trihydro report appears to be reliable because it is based on actual measured data. While it does support a decline after the first monitoring period, the Trihydro report then evidences a steady state of leak detection after that.

Given the limited data available, and that the only available data supports a limited one-time reduction in leak rate frequency, it is reasonable for the Commission to rely on the Division's assumption that LDAR emission reductions remain constant each year, until further data is developed.

VI. The Proposed Rules Strike an Appropriate Balance

The Proposed Rules strike a balance as required by statute and as illustrated by the competing interest of the parties. The Proposed Rules may not meet each and every party's demands; however, they represent a strong compromise that benefits the environment, while also permitting ongoing development of valuable natural resources. The Commission should adopt the Proposed Rules with only minor technical clarifications because the Proposed Rules are carefully crafted to fulfill the policy goals of C.R.S. § 25-7-102. The Proposed Rules are designed to achieve the maximum practical degree of air purity, are among the most stringent air quality regulations for oil and natural gas facilities in the nation, and would result in Colorado being the first state to directly regulate methane. Gov. Hickenlooper Press Release, "Colorado set to become first state to regulate detection, reduction of methane emissions associated with oil and gas drilling," (Nov. 18, 2013). At the same time, the Proposed Rules are structured to be practical and economically reasonable, with benefits that bear a "reasonable relationship to the economic, environmental and energy impacts and other costs." C.R.S. § 25-7-102. The terms of the Proposed Rules are effective and practical, as required by C.R.S. § 25-7-109(1)(a).

Evidenced by the issues raised in the various parties' prehearing statements, the Proposed Rules find common ground. They do not represent a perfect solution to all involved, but the State is not required to promulgate rules blessed by all stakeholders involved. Rather, the State must adhere to the statutory requirement to protect air quality by means the State determines to be practical and economically reasonable. To illustrate this point, some of the issues where the Prehearing Statements evidence diverging views are described below.

A. Emission Reductions and Costs

The Division projects the Proposed Rules would substantially reduce VOC emissions. Some parties have asserted that the actual emission reductions would be far smaller than projected by the Division because the Division overestimated the current level of VOC emissions, or because the regulation would be less effective than projected. Some parties also argued that the projected reduction in VOCs is not necessary because the VOC reduction might not lead to lower ambient ozone concentrations.

Other parties have asserted that larger emission reductions will or may be obtained, both by using different estimates of the projected emission reductions and arguing that greater reductions could and should be achieved by accelerating the LDAR compliance dates, increasing LDAR inspection frequency, and making the LDAR requirements applicable to additional components.

As discussed above, some parties contended that instrument based inspection costs are significantly higher than the Division's estimates. Other parties asserted that instrument based inspections are profitable. The fact that other parties are arguing for both higher and lower costs and higher and lower emission reductions than the Division relied on in its analysis of the Proposed Rules provides further evidence that the Division's Proposed Rules are balanced. As also discussed above, the Noble and Anadarko data supports the Division's cost estimates, and its finding that the Proposed Rules are cost effective.

B. Frequency of LDAR Inspections

The proposed monitoring schedule varies from one-time monitoring at the smallest facilities to monthly monitoring at the largest. The proposed schedule appropriately places greater compliance burdens on facilities that have higher levels of air emissions.

Some parties seek to increase or decrease the frequency of inspections. For example, one party argues that tank and well production facilities with less than six tons per year of emissions should be inspected every two years, rather than one time over the life of the facility. Another party contends that facilities near buildings or outdoor activities should be subject to more frequent inspections. Conversely, yet another party seeks to add a skip monitoring provision that would reduce LDAR frequency if inspections indicate declining levels of discovered leaks; facilities where the number of leaks remains below certain thresholds would reduce their monitoring frequency over time. Thus, again, these divergent views on more frequent and less frequent inspections suggest that the inspection frequency in the Proposed Rule is a balanced approach that accommodates the competing interests of the parties.

C. Implementation Dates

The Proposed Rules contain compliance dates that are intended to implement the rule as expeditiously as possible, while allowing oil and natural gas operators sufficient time to buy and install equipment and to make necessary changes to their operations to begin the extensive new LDAR and STEM requirements, and implement new control requirements. The implementation deadlines reflect concerns that sufficient quantities of IR cameras and emission control devices might not be immediately available from vendors.

Some parties argue that implementation should be delayed beyond the dates in the Proposed Rules. Conversely, other parties seek to accelerate the implementation dates and compliance deadlines. Noble and Anadarko believe that the Proposed Rules contain a reasonable and achievable implementation schedule that balances the concerns of various stakeholders. Noble and Anadarko also believe that the phased implementation schedule set forth in the Proposed Rules is necessary to allow industry to acquire the necessary equipment to ensure successful compliance with the regulation.

Some parties have raised a concern with meeting the leak detection rate of 500 ppm and have proposed a delay in the implementation of that requirement. However, it has been Noble's and Anadarko's experience that vendors have indicated they can presently meet the 500 ppm leak detection rate. Thus, again, the Proposed Rules' implementation schedule is technically feasible and reasonable.

Additional bases of disagreement among the parties, with some wanting a more stringent rule, and others wanting a less stringent rule, are summarized and set forth in a table, attached to this Rebuttal Statement and incorporated herein as if fully set forth herein. **Attachment A.** As this table demonstrates, the rules could be made less stringent or they could be made more stringent. The important point is that a complex rule such as the Proposed Rules forces the Commission to make a large number of decisions about discrete technical issues. Parties can and do have diverse viewpoints about the most appropriate decision for each issue. Given these

divergent viewpoints, there is no single best course of action for the Commission to take. The Colorado APA does not hold the Commission to such an exacting standard. Instead, the Commission's charge is to make reasonable decisions that comply with the statute, are within its scope of authority, and are supported by substantial evidence in the record as a whole. *Dept. of Rev. v. Woodmen of the World*, 919 P.2d 806, 817 (Colo. 1996); *Kramer v. Colo. Dept. of Rev.*, 964 P.2d 629, 631 (Colo. App. 1998); *Ohlson v. Weil*, 953 P.2d 939, 941 (Colo. App. 1997). Thus, the guiding posts for adoption of regulations will focus on evidentiary support that shows the regulations to be protective of the environment, be balanced, be cost effective, and be feasible for operators to implement.

VII. The Proposed Rules Should be Adopted Without Further Substantive Changes

The Proposed Rules impose significant new costs and control requirements on the oil and natural gas industry, and require implementation of entirely new monitoring and recordkeeping programs to document the new LDAR, STEM and AVO inspections. This entails the ordering of large quantities of new monitoring instruments and equipment, hiring and training large numbers of new personnel, setting up extensive new recordkeeping systems that interface with existing monitoring and recordkeeping conducted at the facilities -- all in the space of a one to two-year time frame. The scope and extent of this program is unprecedented and will require significant effort to properly implement and conform to these new monitoring and recordkeeping requirements.

Noble and Anadarko are supportive of the Proposed Rules for the reasons detailed above and as expressed in their joint Prehearing Statement, and believe the commitments represented by the Proposed Rules, with consideration only of further minor technical clarifications being incorporated, are reasonable and cost effective. However, the companies oppose any attempt to make the Proposed Rules more stringent. Noble and Anadarko do not support changes to the Proposed Rules that would impose either fewer or additional requirements or the expansion or contraction of currently proposed monitoring and recordkeeping requirements in any manner that would impact the carefully, properly balance approach to ensure protection of the environment through controls that are technically feasible and cost effective.

Further expansion of already ambitious proposed regulations would jeopardize the industry's ability to implement this new precedent setting monitoring and control program. Further contraction of the ambitious proposed regulations would impact the potential achievement of further air quality benefits at an acceptable cost. The companies believe the Proposed Rules, with minimal technical clarifications, are structured to strike an appropriate and fair balance of costs and requirements with the benefits of reduced VOC and hydrocarbon emissions from oil and natural gas operations in the state of Colorado. There is a tipping point for industry, beyond which more stringent requirements will simply overwhelm the industry's ability to implement meaningful monitoring and control requirements.

For these reasons, Noble and Anadarko urge the Commission to resist attempts to alter the careful balance achieved in the Proposed Rules. Some parties have submitted alternate proposals that would substantially affect this balance. Such proposals are not factually supported or warranted. Many of these proposals simply assert that additional requirements could be imposed or proposed requirements could be reduced without any detailed analysis supporting the

additional requirements. Some proposals are accompanied by (faulty) cost data and arguments that the weaker or stricter requirements would either ensure cost effectiveness or be cost effective. A careful review and analysis of these competing cost analyses fail to support such claims. For all of the reasons stated above, Noble and Anadarko urge the Commission to retain the balance represented by the Proposed Rules.

A. STEM Monitoring and LDAR Inspections Should Not be More Frequent

Inspection frequencies should not be increased from those stated in the Proposed Rules. The Proposed Rules call for significantly more inspections than are currently required. They would impose new requirements to use infrared cameras or other instrument based monitoring techniques. The Commission should adopt the proposed STEM and LDAR inspection requirements. Their effectiveness may be reviewed after more data is collected. STEM or LDAR frequency may be adjusted in a future rulemaking as needed after sufficient data is gathered from the implementation of the requirements from the Proposed Rules.

No legitimate rationale has been presented for increasing inspection frequencies. One party seeks to increase inspection frequencies by revising the way compressor station emissions are determined. The party proposes to use a facility's total potential to emit ("PTE") to determine the inspection frequency, rather than fugitive emissions. However, the only reason provided for this change is that relying on PTE would push compressor stations into a higher tier, resulting in more inspections. Fugitive emissions provide a reasonable proxy for the size and significance of compressor station emissions, and should be used to determine frequency as proposed.

The Commission should reject the arbitrary and unsupported requests for greater inspection frequencies.

B. STEM and LDAR Inspection Phase-in Timelines Should Not be Accelerated or Eliminated

Some parties have advanced conclusory statements that the implementation dates for STEM and LDAR inspections should be earlier than proposed. These parties did not provide any convincing justification for their positions. The parties asserted their unsupported belief that the proposed dates are too far in the future, and that STEM and LDAR inspections could begin sooner.

No attempt has been made to show that an earlier deadline is feasible or would allow adequate time for facilities to implement the Proposed Rules' significant new requirements. The proposed earlier deadline would impose an unreasonable burden. The cumulative burden of simultaneously beginning and implementing the extensive instrument based monitoring program at all operations without the proposed implementation schedule would render the STEM and LDAR program requirements infeasible and impracticable.

C. Additional Recordkeeping and Reporting Requirements Should Not be Imposed

Several parties seek to impose additional recordkeeping or reporting requirements. The parties' alternate proposals would require that STEM plans be submitted to the Division; require all STEM-related records be retained for five years; extend LDAR records retention from two years to five years; and require companies to maintain pneumatic controller records for five years instead of three.

The Division's proposed recordkeeping requirements appropriately balance compliance costs with the Division's ability to inspect facilities and review records. Compiling and maintaining records places a significant burden on owners and operators. Receiving, managing and reviewing reports places a substantial burden on the Division. The Commission should consider the fact that recordkeeping and reporting have value only to the extent they enhance air quality. The purpose and rationale for any such requirements should be clearly articulated. Records lose their value over time and should be destroyed when they are no longer necessary or useful. Reports should not be submitted to the Division unless the Division has the resources to timely review them, while continuing to perform its existing duties. It is quite common for regulatory programs to require that records be kept and made available for inspection, with no submission requirement.

No basis was provided for the various proposals to extend the records retention periods other than the parties' unsupported opinion that two- and three-year retention periods are too short. The proposal to submit STEM reports to the Division is likewise unjustified. The Division's Updated EIA estimates that 5,312 tanks would be subject to STEM. The proposal fails to address whether or how the Division might review or utilize this volume of reports. The parties' alternate recordkeeping proposals are unwarranted and should be rejected.

VIII. The Proposed Rules Do Not Require A Photochemical Modeling-Based Justification

There is no requirement to perform photochemical modeling before revising State-only regulations that limit the emission of VOCs from a source category. The Act requires the Commission to find that "the rule shall result in a demonstrable reduction in air pollution." C.R.S. § 25-7-110.8(1)(b). This demonstration must be supported by substantial evidence in the record as a whole. *Bd. of Assessment Appeals v. AM/FM Int'l*, 940 P.2d 338, 347 (Colo. 1997); *Pilgrim Rest Baptist Church, Inc. v. Prop. Tax Adm'r*, 971 P.2d 270, 272 (Colo. App. 1998); *Echo-Star Satellite, L.L.C. v. Arapahoe County Bd. of Equaliz.*, 171 P.3d 633, 636 (Colo. App. 2007). Emission inventories and projections that the Proposed Rules will substantially reduce VOC emissions are sufficient to demonstrate a reduction in air pollution. The statute does not specifically require photochemical modeling.

The Commission has the authority to limit VOC emissions as a forward-looking measure to facilitate future attainment of the ozone standards without a detailed calculation of the resulting change in ozone concentrations. The Commission has discretion to make this policy choice, and its administrative expertise is entitled to deference. *Brighton Pharm., Inc. v. Colo. State. Pharm. Bd.*, 160 P.3d 412, 416 (Colo. App. 2007)(citations omitted). The Commission made a similar choice in 2006 when it placed statewide VOC limits on tanks, dehydrators and

engines. The Statement of Basis and Purpose accompanying the 2006 revision did not cite photochemical ozone modeling as a basis for that revision. Regulation 7 § XIX.J. Similarly, there is no such requirement for the adoption of the Proposed Rules.

IX. Response to the Division's Proposed Revisions

The Division submitted certain technical corrections, clarifications, and substantive changes to the Proposed Rules. Several of these changes appear to adopt language proposed by DCP Midstream from its Prehearing Statement, including certain new definitions, new provisions for compressor seals and open-ended valves or lines, and emission reductions from glycol dehydrators. Noble and Anadarko support these revisions.

X. Exhibits and Attachments

Noble and Anadarko submit the following exhibits and attachments for the Commission's consideration as it evaluates the information and testimony presented at the hearing:

- 1. Noble cost spreadsheet. Exhibit A.
- 2. Anadarko cost spreadsheet. Exhibit B.
- 3. Noble and Anadarko Responses to Significant Issues Raised in Prehearing Statements. **Attachment A**.
- 4. Legal Memorandum Opposing Expansion of Regulation to Address Hazardous Air Pollutants. **Attachment B**.
- 5. Legal Memorandum Opposing Conservation Group's Request for an Order Requiring the Division to Perform Ozone Modeling and Propose an Ozone Plan that Demonstrates Ozone Attainment. **Attachment C**.

XI. Rebuttal Witnesses

Witnesses who may testify at the hearing on behalf of Noble and Anadarko include:

- Denise Kennedy
 Holland & Hart, LLP
 Attorney for Noble and Anadarko
- Brian Lockard
 Director, EHSR, US Onshore
 Noble
- 3. Chad Schlichtemeier EHS Manager Anadarko

These witnesses were previously identified as witnesses for Noble and Anadarko's case in chief. They may testify regarding the legal and factual issues raised in Noble and Anadarko's Prehearing Statement, Rebuttal Statement, or both.

XII. Written Testimony

At this time, Noble and Anadarko do not have written testimony to present. Consistent with the hearing officer's statements at the Prehearing Conference, Noble and Anadarko reserve the right to present additional written testimony prior to the hearing date.

Respectfully submitted this 30th day of January, 2014.

By:

Denise W. Kennedy Lawrence E. Volmert Christopher L. Colclasure Holland & Hart LLP 555 17th Street, Suite 3200

Denver, CO 80202 303-295-8000

ATTORNEYS FOR NOBLE ENERGY, INC. AND ANADARKO PETROLEUM CORPORATION

CERTIFICATE OF SERVICE

I certify that on January 30, 2014, I served copies of the foregoing Rebuttal Statement of Noble Energy, Inc. and Anadarko Petroleum Corporation to the following by electronic mail:

Be The Change USA, a non-profit organization represented by Phil Doe and Wes Wilson

Represented By:

Phil Doe

7140 South Depew Littleton, CO 80128 303-973-7774

Email: ptdoe@comcast.net

Wes Wilson 2505 Yates Street Denver, CO 80212 719-337-0402

Email: anwwilson@comcast.net

Chevron USA, Inc., and its affiliates Chevron Midcontinent, LP, and Four Star Oil & Gas Company (Chevron)

Represented By:

Poulson Odell & Peterson LLC 1775 Sherman Street, Suite 1400 Denver, CO 80203 303-861-4400

Scott M. Campbell

Email: scampbell@popllc.com

Jeremy I. Ferrin

Email: jferriin@poplic.com

PARTY

Cheyenne County P.O. Box 567 Cheyenne Wells, CO 80810 719-767-5872

Represented By:

Board of County Commissioners: Rod Pelton, Nancy Bogenhagen, Patrick J. Ward, Vice Chair

Email: ccadmin@rebeltec.net

PARTY

City of Greeley 1100 10th Street Greeley, CO 80634 970-350-9786

Brad Mueller, Director of Community Development

Email: brad.mueller@greeleygov.com

PARTY

Colorado Association of Commerce & Industry

(CACI)

1600 Broadway, Suite 1000

Denver, CO 80202

303-866-9622

Represented By:

Carly West

Email: cwest@cochamber.com

PARTY

Colorado Oil & Gas Association

PO Box 540

Denver, CO 80201

303-861-0362

Tisha Schuller

Email: tisha.schuller@coga.org

Andrew Casper

Email: andrew.casper@coga.org

Represented By:

Jost & Shelton Energy Group, P.C. 1675 Larimer Street, Suite 420

Denver, CO 80202

720-379-1812

Jamie L. Jost

Email: jjjost@jsenergygroup.com

James P. Parrot

Email: jparrot@jsenergygroup.com

Colorado Petroleum Association (CPA) 1700 Lincoln Street, Suite 2545

Denver, CO 80203

303-860-0099

Represented By:

Hogan Lovells US LLP

1200 Seventeenth Street, Suite 1500

Denver, CO 80202

Jennifer L. Biever, Esq.

303-454-2410

Email: Jennifer.biever@hoganlovells.com

Stan Dempsey, Jr.

Email: stan@coloradopetroleumassociation.org

Ana Maria Gutierrez, Esq.

303-454-2514

Email: ana.gutierrez@hoganlovells.com

PARTY

Colorado Utilities Coalition for Clean Air (includes: Platte River Power Authority, Tri-State Generation and Transmission Association Inc., Public Service Company of Colorado doing business as Xcel Energy, and Colorado Springs Utilities)

Represented By:

Ryley Carlock & Applewhite 1700 Lincoln Street, Suite 3500 Denver, CO 80203 303-863-7500

James W. Sanderson

Email: jsanderson@rcalaw.com

Julie A. Rosen

Email: jrosen@rcalaw.com

PARTY

DCP Midstream, LP 370 17th Street, Suite 2500 Denver, CO 80202

Represented By:

Carver Schwarz McNab Kamper & Forbes, LLC 1600 Stout Street, Suite 1700 Denver, CO 80202 303-893-1815

Jeffrey W. Schwarz, Esq. Email: jschwarz@csmkf.com

Stewart McNab, Esq. Email: smcnab@csmkf.com

PARTY

DGS Client Group

(includes: Bill Barrett Corporation, Black Hills Exploration and Production, Bonanza Creek Energy Inc., PDC Energy Inc., and Whiting Oil and Gas Corporation) Represented By:

Davis Graham & Stubbs LLP 1550 17th Street, Suite 500 Denver, CO 80202-1500 303-892-9400

John R. Jacus, Esq.

Email: john.jacus@dgslaw.com

Zach C. Miller, Esq.

Email: zach.miller@dgslaw.com

Radcliffe Dann IV, Esq.

Email: randy.dann@dgslaw.com

Eric P. Waeckerlin, Esq.

Email: eric.waeckerlin@dgslaw.com

PARTY

Earthworks Oil and Gas Accountability Project (OGAP)
PO Box 1102
Durango, CO 81302

Represented By:

Earthjustice 1400 Glenarm Place, Suite 300 Denver, CO 80202 303-623-9466

Robin L. Cooley

Email: rcooley@earthjustice.org

Michael S. Freeman

Email: mfreeman@earthjustice.org

PARTY

Encana Oil & Gas (USA), Inc. (Encana)

Represented By:

Beatty & Wozniak, P.C. 216 16th Street, Suite 1100 Denver, CO 80202 303-407-4499

James Martin

Email: jmartin@bwenergylaw.com

PARTY

Environmental Defense Fund (EDF) 2060 North Broadway, Suite 300 Boulder, CO 80302 303-447-7213 Dan Grossman, Rocky Mountain Regional Director and Senior Attorney

Email: dgrossman@edf.org

Represented By:

The Gallagher Law Group 2060 North Broadway, Suite 280 Boulder, CO 80302 303-800-6901

303-800-0901

Thomas A. Bloomfield

Email: tbloomfield@thegallaghergroup.com

DeLone Law, Inc. 1555 Jennine Place Boulder, CO 80304-1834 303-442-0610 Elizabeth DeLone Paranhos

Email: elizabethparanhos@delonelaw.com

PARTY

Garfield County 195 West 14th Street Rifle, CO 81650 970-625-5200

Board of County Commissioners: John Martin-Chair, Tom Jankovsky and Mike Samson Environmental Health Manager: Paul Reaser Oil and Gas Liaison: Kirby Wynn

County Attorney: Frank Hutfless

Represented By:

Kirby Wynn Oil and Gas Liaison 970-625-5905

Email: kwynn@garfield-county.com

PARTY

Grand Valley Citizens Alliance (GVCA), Weld Air and Water (WAW), Community Alliance of the Yampa Valley (CAYV), Citizens for Clean Air (CCA), Western Colorado Congress (WCC), and NFRIA-WSERC Conservation Center

Grand Valley Citizens Alliance (GVCA) PO Box 656 Silt, CO 81652 Bob Arrington, GVCA Member

Weld Air and Water (WAW) 1717 17th Avenue Greeley, CO 80631 Wendy Highby, Founding Member Community Alliance of the Yampa Valley PO Box 772695 Steamboat Springs, CO 80477 Rodger Steen, Board Member

Citizens for Clean Air (CCA) 514 Rado Drive #F Grand Junction, CO 81507 Tom Phillips, Board Member

Western Colorado Congress (WCC) PO Box 1931 Grand Junction, CO 81502 Rein van West, President

NFRIA-WSERC Conservation Center PO Box 1612 204 Poplar Avenue Paonia, CO 81428 Sarah Sauter, Executive Director

Represented By:
Matthew Sura, Esq.
4291 Prado Drive
Boulder, CO 80303
720-563-1866
mattsura.law@gmail.com

PARTY

La Plata County 1060 East 2nd Avenue Durango, CO 81301 970-382-6200

Board of County Commissioners: Robert "Bobby" Lieb, Jr.-Chair, Julie Westendorff, and Gwen Lachelt

Represented By:

Todd A. Weaver, Esq. Deputy County Attorney La Plata County Attorney's Office 1099 Main Avenue, Suite 313 Durango, CO 81301 970-382-8600

Email: weaver@lpcattorney.org

Courtney Roseberry
La Plata County Natural Resources Planner
1060 East 2nd Avenue
Durango, CO 81301
970-382-6390
Email: Courtney.Roseberry@co.laplata.co.us

Leslie Jakoby La Plata County Environmental Specialist 1060 Main Avenue, Suite 104 Durango, CO 81301 970-382-6376

Email: Leslie.Jakoby@co.laplata.co.us

PARTY

Local Government Coalition

(includes: City and County of Denver, La Plata County, San Miguel County, Pitkin County, Boulder County, Adams County, City of Fort Collins, City of

Boulder)

Represented By:

On behalf of Boulder County:

Pamela H. Milmoe Air Quality Coordinator Boulder County Public Health 3450 Broadway Boulder, CO 80304 303-441-1189

Email: pmilmoe@bouldercounty.org

Ben Doyle

Assistant County Attorney

Boulder County P.O. Box 471 Boulder, CO 80306 303-441-3854

Email: bdoyle@bouldercounty.org

On behalf of the City and County of Denver:

Gregg W. Thomas

Manager of Air, Water, and Climate Section City and County of Denver Dept of Environmental Health

201 West Colfax Avenue, Dept. 1009

Denver, CO 80202 720-865-5413

Email: gregg.thomas@denvergov.org

Jessica R. Brody Assistant City Attorney City and County of Denver 201 West Colfax Avenue, Dept. 1207 Denver, CO 80202 720-913-3267

Email: Jessica.Brody@denvergov.org

Katherine Wilmoth Assistant City Attorney City and County of Denver 201 West Colfax Avenue, Dept. 1207 Denver, CO 80202 720-913-3253

Email: Katherine.Wilmoth@denvergov.org

PARTY

Mesa County 544 Rood Avenue Grand Junction, CO 81501 970-244-1605

John Justman, Mesa County Commissioner Email: John.Justman@mesacounty.us

Represented By:

Mesa County Planning 200 South Spruce Street Grand Junction, CO 81501

Randy Price, Senior Planner

970-244-1759

Email: randy.price@mesacounty.us

Mesa County Public Works 200 South Spruce Street Grand Junction, CO 81501

Pete Baier, Director 970-244-1689

Email: peter.baier@mesacounty.us

PARTY

Moffat County 221 West Victory Way, Suite 250 Craig, CO 81625 970-824-9115

Charles G. Grobe

Email: cgrobe@moffatcounty.net

Represented By:

Jeff Comstock, Natural Resources Director Moffat County 221 West Victory Way, Suite 130 Craig, CO 81625 970-826-3400

Email: jcomstock@moffatcounty.net

PARTY

Montezuma County 109 West Main, Room 302 Cortez, CO 81321 970-565-8317

Board of County Commissioners: Steve Chappel-Chair, Keenan G. Ertel, Larry Don Suckla

County Attorney: John Baxter County Administrator: Melissa Brunner Office of Community Services: James Dietrich Represented By:

Office of Community Services 109 West Main, Room 304 Cortez, CO 81321 970-565-7402

Email: jdietrich@co.montezuma.co.us

Natural Resources Defense Council (NRDC) 1152 15th Street NW Washington, DC 20005 202-289-6868

Represented By:

Earthjustice 1400 Glenarm Place, Suite 300 Denver, CO 80202 303-623-9466

Robin L. Cooley

Email: rcooley@earthjustice.org

Michael S. Freeman

Email: mfreeman@earthjustice.org

PARTY

Noble Energy, Inc. & Anadarko Petroleum Corporation

Represented By:

For both Noble and Anadarko: Denise W. Kennedy, Esq. Holland & Hart LLP 555 17th Street, Suite 3200 Denver, CO 80202 303-295-8066

Email: dkennedy@hollandhart.com

For Noble:

Denee A. DiLuigi, Esq. Noble Energy, Inc. 1625 Broadway, Suite 2200 Denver, CO 80202 303-228-4251

Email: DDiluigi@nobleenergyinc.com

For Anadarko:

Julia A. Jones, Esq. Anadarko Petroleum Corporation 1099 18th Street, Suite 1800 Denver, CO 80202

720-929-6850

Email: Julia.Jones@anadarko.com

PARTY

Phillips County 221 South Interocean Avenue Holyoke, CO 80734 970-854-3778

Board of County Commissioners: K. Joe Kinnie-Chair, Donald J. Lock, and Harlan Stern

Represented By:

Randy Schafer, Administrator

Email: Randy.Schafer@phillipscounty.co

Laura Schroetlin, Administrative Assistant Email: Laura.Schroetlin@phillipscounty.co

PARTY

Pioneer Natural Resources USA, Inc. 1401 17th Street, Suite 1200 Denver, CO 80202 303-298-8100

Represented By:

Douglas P. Wall, Associate General Counsel Email: doug.wall@pxd.com

PARTY

Regional Air Quality Council (RAQC) 1445 Market Street, Suite 260 Denver, CO 80202 303-629-5450

Represented By:

Kenneth H. Lloyd, Executive Director 303-629-5450 x250 Email: klloyd@raqc.org

PARTY

Rio Blanco County 200 Main Street Meeker, CO 81641 970-683-8799

Shawn Bolton

Email: sbolton@co.rio-blanco.co.us

Represented By:

Mark Sprague, Natural Resource Specialist 970-878-9584

Email: msprague@co.rio-blanco.co.us

PARTY

Sierra Club 620 16th Street, Suite 300 Denver, CO 80202

Represented By:

Earthjustice 1400 Glenarm Place, Suite 300 Denver, CO 80202 303-623-9466

Robin L. Cooley

Email: rcooley@earthjustice.org

Michael S. Freeman

Email: mfreeman@earthjustice.org

PARTY

Washington County 150 Ash Street Akron, CO 80720 970-345-2701

Board of County Commissioners: David Foy-Chair, Lea Ann Laybourn, and Terry Hart

Represented By:

Chris Packer, Administrator

Email: cpacker@co.washington.co.us

Val Foutz, Assistant to Board Email: vfoutz@co.washington.co.us

PARTY

Weld County 1150 O Street PO Box 758 Greeley, CO 80632 970-336-7234

Board of County Commissioners: William "Bill" Garcia-Chair, Douglas Rademacher, Sean Conway, Mike Freeman and Barbara Kirkmeyer

Represented By:

Bruce T. Barker, Attorney Email: bbarker@co.weld.co.us

PARTY

WildEarth Guardians (WEG) 1536 Wynkoop, Suite 301 Denver, CO 80202 Represented By:
Earthjustice
1400 Glenarm Place, Suite 300
Denver, CO 80202

Robin L. Cooley

303-623-9466

Email: rcooley@earthjustice.org

Michael S. Freeman

Email: mfreeman@earthjustice.org

PARTY

Worldwide Liquid Solutions, LLC 700 Independent Avenue Grand Junction, CO 81505

Represented By:

Dan Wilson, Attorney at Law 607 25 Road, Suite 201 Grand Junction, CO 81505 970-248-5800

Email: Dan@danwilsonlaw.us

PARTY

WPX Energy Rocky Mountain LLC and WPX Energy Production LLC (WPX) 1001 17th Street, Suite 1200 Denver, CO 80202

Represented By:

Lisa A. Decker, Senior Counsel

303-606-4080

Email: <u>lisa.decker@wpxenergy.com</u>

JoDell Mizoue, Environmental Supervisor

303-606-4056

Email: jodell.mizoue@wpxenergy.com

PARTY

XTO Energy Inc. (XTO) 9127 South Jamaica Street Englewood, CO 80112 303-397-3657

Karen Hill-Pratt, Regulatory Affairs Advisor Email: Karen Hill-Pratt@xtoenergy.com

Represented By:

XTO Energy Inc. 714 Main Street Fort Worth, TX 76102 817-885-6802

Michael Cannon, Counsel

Email: Michael Cannon@xtoenergy.com

Hogan Lovells US LLP 1200 Seventeenth Street, Suite 1500 Denver, CO 80202

Jennifer L. Biever, Esq. 303-454-2410

Email: Jennifer.biever@hoganlovells.com

Ana Maria Gutierrez, Esq. 303-454-2514

Email: ana.gutierrez@hoganlovells.com

PARTY

Yuma County 310 Ash Street, Suite A Wray, CO 80758 970-332-5796

Board of County Commissioners: Robin Wiley-Chair, Dean Wingfield and Trent Bushner

Represented By:

Linda Briggs, Yuma County Administrator Email: adminlanduse@co.yuma.co.us

Vicky Southards, Yuma County Finance Officer

Email: finance@co.yuma.co.us

Office of the Attorney General-Commission Attorney

Colorado Department of Law Natural Resources Section – Air Quality Unit 1300 Broadway, 10th Floor Denver, CO 80203

Tom Roan Ph: 720-508-6268

Email: Tom.Roan@state.co.us

Office of the Attorney General-Division Attorney

Colorado Department of Law Natural Resources Section – Air Quality Unit 1300 Broadway, 10th Floor Denver, CO 80203

Clay Clarke Ph: 720-508-6250

Email: Clay.Clarke@state.co.us

Robyn Wille Ph: 720-508-6261

Email: Robyn.Wille@state.co.us

Linda Miller Ph: 720-508-6277

Email: Linda.Miller@state.co.us

Air Quality Control Commission (AQCC)

4300 Cherry Creek Drive South, EDO-AQCC-A5 Denver, CO 80246

Commissioner John Loewy - Hearing Officer

Email: jloewy@mac.com

Mike Silverstein – Administrator/Technical Secretary

Ph: 303-692-3478

Email: Mike.Silverstein@state.co.us

Theresa Martin - Program Coordinator

Ph: 303-692-3476

Email: Theresa.Martin@state.co.us

Air Pollution Control Division (APCD)

4300 Cherry Creek Drive South, APCD B1 Denver, CO 80246

Will Allison - Division Director

Ph: 303-692-3114

Email: William.Allison@state.co.us

Garry Kaufman - Deputy Division Director

Ph: 303-692-3269

Email: Garrison.Kaufman@state.co.us

Kirsten King - Program Manager

Ph: 303-692-3178

Email: Kirsten.King@state.co.us

ptdoe@comcast.net anwwilson@comcast.net scampbell@poplic.com jferrin@popllc.com brad.mueller@greeleygov.com cwest@cochamber.com tisha.schuller@coga.org andrew.casper@coga.org ijost@jsenergygroup.com jparrot@jsenergygroup.com stan@coloradopetroleumassociation.org Jennifer.biever@hoganlovells.com ana.gutierrez@hoganlovells.com jsanderson@rcalaw.com jrosen@rcalaw.com jschwarz@csmkf.com smcnab@csmkf.com john.jacus@dgslaw.com zach.miller@dgslaw.com randy.dann@dgslaw.com eric.waeckerlin@dgslaw.com rcooley@earthjustice.org mfreeman@earthjustice.org imartin@bwenergylaw.com dgrossman@edf.org tbloomfield@thegallaghergroup.com elizabethparanhos@delonelaw.com kwynn@garfield-county.com mattsura.law@gmail.com weaver@lpcattorney.org Courtney.Roseberry@co.laplata.co.us Leslie.Jakoby@co.laplata.co.us pmilmoe@bouldercounty.org bdoyle@bouldercounty.org gregg.thomas@denvergov.org Jessica.Brody@denvergov.org Katherine.Wilmoth@denvergov.org John.Justman@mesacounty.us Randy.price@mesacounty.us Peter.baier@mesacounty.us cgrobe@moffatcounty.net jcomstock@moffatcounty.net jdietrich@co.montezuma.co.us dkennedy@hollandhart.com DDiluigi@nobleenergyinc.com Julia.Jones@anadarko.com Randy.Schafer@phillipscounty.co Laura.Schroetlin@phillipscounty.co doug.wall@pxd.com klloyd@ragc.org sbolton@co.rio-blanco.co.us msprague@co.rio-blanco.co.us cpacker@co.washington.co.us vfoutz@co.washington.co.us bbarker@co.weld.co.us Dan@danwilsonlaw.us lisa.decker@wpxenergy.com jodell.mizoue@wpxenergy.com

Karen_Hill-Pratt@xtoenergy.com Michael_Cannon@xtoenergy.com adminlanduse@co.yuma.co.us finance@co.yuma.co.us iloewy@mac.com
Mike.Silverstein@state.co.us
Theresa.Martin@state.co.us
Tom.Roan@state.co.us
William.Allison@state.co.us
Garrison.Kaufman@state.co.us
Kirsten.King@state.co.us
Clay.Clarke@state.co.us
Robyn.Wille@state.co.us
Linda.Miller@state.co.us

6635826 3.DOCX